

**CLAIMS:**

1. A method of reducing a dosage size of an at least one NSAID in the treatment of a patient in need of an NSAID therapy, comprising simultaneous or step-wise administering of curcumin and said at least one NSAID, the curcumin  
5 being in an amount sufficient to reduce the NSAID concentration needed while maintaining the same therapeutic effect as compared to administering the NSAID alone.
2. The method according to claim 1, wherein said NSAID is selected from ketorolac, nabumetone, salsalate, diclofenac, indomethacin, nabumetone,  
10 phenylbutazone, oxyphenbutazone, dipyrrone, ramifenazone, tenoxicam, valdecoxib, parecoxib, etoricoxib, celecoxib, sulindac, sulindac sulfide, exisulind, ibuprofen, naproxen, naproxen sodium, rofecoxib, nimesulide, aspirin, tolmetin, fenoprofen, flurbiprofen, loxoprofen, vedaprofen, meclofenamic acid, meclofenamate sodium, tolfenamic acid, acetaminophen, flunixin, piroxicam,  
15 oxaprozin, meloxicam, ketoprofen, etodolac, diflunisal and the like or any derivative, analogue, salt or prodrug thereof.
3. The method according to claim 2, wherein said drug is celecoxib, nimesulide, sulindac or sulindac sulfide or derivatives, analogues, salts or prodrugs thereof.
- 20 4. The method according to claim 2, wherein said drug is not celecoxib or derivatives, analogues, salts or prodrugs thereof.
5. The method according to claim 1, wherein said curcumin is a curcumin analogue or derivative selected from demethoxycurcumin and bisdemethoxycurcumin.
- 25 6. A method for treating an inflammatory disease or disorder in a patient, said method comprising administering to said patient curcumin and at least one NSAID, the amount of curcumin and said NSAID being effective so that in combination they have an anti-inflammatory effect.

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7. A method for treating cancer in a patient in need thereof, said method comprising administering to said patient curcumin and at least one NSAID, the amount of curcumin and said NSAID being effective so that in combination they have an anti-cancer effect.

5 8. The method according to claim 6 or 7, wherein the amount of said NSAID is less than the amount of an NSAID administered alone in order to obtain a similar anti-inflammatory or anti-cancer effect.

9. The method according to claim 6 or 7, wherein said curcumin and said NSAID are administered not within the same formulation.

10 10. The method according to claim 6 or 7 wherein said NSAID is celecoxib, nimesulide, sulindac or sulindac sulfide or derivatives, analogues, salts or prodrugs thereof.

11. The method according to claim 6 or 7, wherein said NSAID is a drug other than celecoxib, or a drug other than sulindac, or a drug other than sulindac sulfide  
15 or derivatives, analogues, salts or prodrugs thereof.

12. A method for inhibiting cancer cell growth, comprising contacting cancer cells with an effective amount of a formulation comprising curcumin and at least one NSAID.

13. The method according to claim 12, wherein said cells are contacted with a  
20 single formulation comprising both curcumin and at least one NSAID.

14. The method according to claim 12 wherein said cells are contacted with a formulation containing curcumin, followed by contacting with a second formulation containing said at least one NSAID.

15. The method according to claim 12 wherein said cells are contacted with a  
25 formulation containing said at least one NSAID, followed by contacting with a second formulation containing curcumin.

16. A method for the treatment of cancer comprising administering to an individual in need of an effective amount of curcumin and an effective amount of at least one NSAID, the amounts being such so as to yield a synergistic combined  
30 effect of the two.

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17. A method for the reduction of inflammation comprising administering to a patient in need of as an anti-inflammatory treatment an effective amount of curcumin and an effective amount of at least one NSAID drug, the amounts being such so as to yield a synergistic combined effect of the two.

5 18. A pharmaceutical composition comprising curcumin and at least one NSAID drug and a pharmaceutically acceptable carrier, excipient or diluent.

19. A pharmaceutical composition for the treatment of cancer, said composition comprising curcumin and at least one NSAID drug and a pharmaceutically acceptable carrier, excipient or diluent.

10 20. The composition according to claim 19, wherein said cancer is selected from leukemia, carcinomas, sarcomas, cancers of the brain, breast, cervix, colorectal, colon, head and neck, kidney, lung, non-small cell lung, melanoma, mesothelioma, ovary, sarcoma, stomach, uterus and Medulloblastoma.

15 21. The composition according to claim 20, wherein said cancer is colorectal or colon cancer.

22. A pharmaceutical composition for the treatment of inflammatory diseases or disorders, said composition comprising curcumin and at least one NSAID drug and a pharmaceutically acceptable carrier, excipient or diluent.

20 23. The pharmaceutical composition according to claim 22, wherein said inflammatory disease or disorder is selected from arthritis, rheumatoid arthritis (RA), spondyloarthropathies, gouty arthritis, osteoarthritis, systemic lupus erythematosus and juvenile arthritis, acne vulgaris, acute respiratory distress syndrome, Addison's disease, allergic rhinitis, allergic intraocular inflammatory diseases, ANCA-associated small-vessel vasculitis, atherosclerosis, atopic dermatitis, 25 autoimmune hemolytic anemia, autoimmune hepatitis, Behcet's disease, Bell's palsy, cerebral ischemia, Cogan's syndrome, dermatomyositis and psoriatic arthritis.

24. The pharmaceutical composition according to claim 23, wherein said inflammatory disease or disorder is arthritis.

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25. The composition of any one of claims 20 to 24 further comprising one or more additional active ingredients, selected from antibiotics, conventional anti-cancer, anti-inflammatory agents and other agents suitable for combination therapy.

26. The composition according to any one of claims 20 to 25, wherein said  
5 curcumin is in an amount sufficient to reduce the amount of said at least one NSAID needed while maintaining the same therapeutic effect as compared to administering the NSAID alone.

27. The composition according to claim 26, for the treatment of any such disease or disorder treated by at least one NSAID.

10 28. A pharmaceutical composition for the treatment of cancer, comprising an effective amount of at least one NSAID, to be administered following treatment with curcumin.

29. A pharmaceutical composition for the treatment of inflammation, comprising an effective amount of at least one NSAID, to be administered  
15 following treatment with curcumin.

30. A pharmaceutical composition for the treatment of cancer, comprising an effective amount of curcumin, to be administered following treatment with at least one NSAID.

31. A pharmaceutical composition for the treatment of inflammation,  
20 comprising an effective amount of curcumin, to be administered following treatment with at least one NSAID.

32. A combination of two pharmaceutical compositions including a first composition comprising an effective amount of at least one NSAID drug, and a second composition comprising an effective amount of curcumin, the combination  
25 is intended for administering to a subject for treatment of cancer or inflammation, in which treatment said second composition is administered after administering said first composition.

33. A prophylactic formulation comprising curcumin and at least one NSAID and a pharmaceutically acceptable carrier, excipient or a diluent.

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34. The prophylactic formulation according to claim 33 for use in the prevention of cancer or in the reduction of the likelihood of contracting cancer in a subject susceptible to contracting said disease.

35. Use of curcumin and at least one NSAID for the preparation of a pharmaceutical composition.

36. The use according to claim 35, wherein said composition is used for the treatment of cancer or inflammation.

37. The use according to claim 35, wherein said curcumin is in an amount sufficient to reduce the amount of said at least one NSAID needed while maintaining the same therapeutic effect as compared to administering said NSAID alone.

38. Use of at least one NSAID for the preparation of a pharmaceutical composition for the treatment of cancer or inflammation in a subject, said composition is to be administered following treatment with curcumin.

39. Use of at least one NSAID for the preparation of a pharmaceutical composition for the treatment of cancer or inflammation in a subject, said composition is to be administered simultaneously with treatment with curcumin.

40. Use of curcumin for the preparation of a pharmaceutical composition for the treatment of cancer or inflammation in a subject, said composition is to be administered following treatment with at least one NSAID.

41. Use of curcumin for the preparation of a pharmaceutical composition for the treatment of cancer or inflammation in a subject, said composition is to be administered simultaneously with treatment with at least one NSAID.

42. A kit or a commercial package comprising a dosage unit of the composition of any one of claims 18 to 32.

43. A kit or a commercial package comprising a dosage unit of the vaccine of any one of claims 33 to 34.

44. The kit of claims 42 or 43, wherein said composition is in a single dosage unit.

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45. The kit of claims 42 or 43, wherein said composition is in a number of different dosage forms.

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